Online lurking: benefit or barrier to learning?

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CHAPTER TEN

ONLINE LURKING: BENEFIT OR BARRIER TO LEARNING?

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Keywords

networked collaborative learning; non-participation; online silence; virtual auto-ethnography; content analysis; critical event recall

Introduction

Networked collaborative learning is a means of connecting learners in disparate locations worldwide; however, collaboration relies on learners actively engaging in activities such as discussions. Where they do not participate the result is online silence. Two common kinds of online silence are: logging on to a conference and reading other contributions to a discussion but not making a contribution yourself (often known as "lurking") and not reading the discussion threads at all (for example by failing to log on). Researchers and practitioners studying or delivering networked collaborative learning need to interpret and understand the role of periods of apparent inactivity as well as observable active study, even if it is difficult to conceptualise (Littleton 1999: 182).

Participants in collaborative discussions do not verbalise all that they are learning and learning takes place both in and outside of the discussions. Silence is associated with reflection, which enriches learning, particularly for adult professionals (Schön 1983; Brookfield 1995).The findings of this research show that some online learners benefited from having time to reflect on issues raised before making their own contribution; they could think about arguments and synthesise ideas

(Buckner and Morss 1999; Light and Light 1999; Brookfield and Preskill 2005).

Learning is a social experience and conversation a key social medium; however, in computer-mediated exchanges, students may feel less obliged to respond; indeed, peripheral participation is seen as legitimate, for example to introduce new members into a group (Wenger 1998; Lave and Wenger 1991; Light and Light 1999). However, in the researched programme, whilst for some people silence was an opportunity to think before posting, for others it was frustrating and bewildering. Ironically, reflective silence may be valuable for the learning of individuals, especially for introverted or intimidated students (Brookfield and Preskill 2005) but may frustrate high participators and impoverish the learning of the group because it cannot benefit fully from sharing diverse opinions.

Given the widespread use of online discussions and the potential importance of non-participation in these, the objectives of this chapter are to:

- explore the significance of silence in networked collaborative learning
- highlight some of the challenges involved in researching online silence.

Background

The researched programme

The research was carried out in pursuance of a Doctorate in Education, successfully completed in 2008. The researched programme was a 9-month online distance learning programme (at the equivalent of undergraduate degree level) about online learning, for educational professionals who were, or would be, implementing e-learning projects in their institutions. It was offered worldwide, but students in the cohort studied were all based in the United Kingdom. It was a prerequisite that students had either previously completed a specific online programme (or an equivalent) or have equivalent experience in e-learning. I was a student on this programme and also researched the programme.

The programme comprised:

- 3 months of preliminary work, by email contact and computer conferencing
- 4 months of computer conferencing and keeping peer-reviewed logs of personal e-learning implementation
- 2 months of working offline on the portfolio assessment.

The programme used minimal online learning materials and the main focus was the online conferences facilitated by a tutor but led by each of the students in turn. The conferencing took place on a discussion board using proprietary computer conferencing software.

The research focused on a period of four months when students participated in seven online asynchronous conferences on subjects of their choice connected with implementing e-learning. They were required to post a message at least once per month and to lead at least one conference. No other roles (such as scribe or summariser) were allocated. There were originally seven students in the cohort, but one withdrew, leaving three women (including myself) and three men. There was also one male tutor. In view of the size of the group, the findings may not be generalisable, in the sense of being representative of every on-line group.

Online silence and reflection

Silence is frequently associated with reflection which is said to be particularly important to professionals; both reflection after an event and reflection-in-action (a kind of spontaneous research) (Schön 1983; Brookfield 1995). Buckner and Morss (1999: 37) acknowledge that reflective thought is important to a rich learning experience and recognise that, in online learning, students need to have sufficient time to reflect on issues raised in a debate before making their own contribution.

According to Harasim *et al.* (1995: 194) online learning promotes reflection in that students can review and reread what has taken place as often as is needed for understanding and retention. Light and Light (1999: 170) support this view, suggesting that computer conferencing is good for quiet, reflective people. This particularly applies to those who wait for the argument to develop and tend to take time to think about it, or would like to go and research the issue before saying anything. However, this shyness can also cause some people to be too inhibited to put forward their ideas or questions, even in written rather than face-to-face situations. In addition, as Hammond's research (1999: 357) found, there are built-in paradoxes: the permanence of online messages may help reflection, but also inhibits potential contributors who do not want their messages available to permanent scrutiny.

Online silence and collaboration

The use of derogatory terms like lurking tends to suggest that non-participation, particularly in the context of networked collaborative

learning, is fundamentally anti-social. Feenberg (1989: 24) points out that asynchronous conferencing may mean that unusual delay is interpreted as a sign of rejection or indifference since there is no mechanical excuse for silence. He describes online silence as "a message that is both brutal and ambiguous" (ibid: 34). However, Wenger (1998: 57) claims that our engagement with the world is social even when it does not clearly involve social interactions with others. Even when an individual is preparing a presentation alone in a hotel room, this is social because the audience is "there": their colleagues are looking over their shoulder, representing accountability to their professional community.

The concept of legitimate peripheral participation (Lave and Wenger 1991; Wenger 1998: 100) suggests that it may be legitimate (i.e. acceptable) for a lurker to read other participants' messages, by way of apprenticeship, before becoming a full participant. Brookfield and Preskill (2005) suggest it is important not to mistake silence for inertia or disengagement and point to the value of reflective silence (ibid: 65). They believe that email (and, by analogy online learning) allows time for reflection (ibid: 122) and imply that students are "saying too little" only when it becomes a problem for their learning (ibid: 178).

However, in the case of collaborative online learning, this fails to take into account the possible effect on other learners. Too much silence may hinder the learning of the rest of the group who cannot benefit from the very sharing of diverse opinions that the authors extol (Brookfield and Preskill 2005: 3, 4 and 9). In this sense it could be argued that non-participation is fundamentally undemocratic as one person's autonomous decision not to contribute openly their perspective on the topic (despite rules on minimum postings required) can decrease the richness of the others' learning experience.

Methodology

Researching silence is methodologically challenging! In order to understand how online learning took place in the researched programme, I used the interpretivist approach of virtual auto-ethnography (ethnography in that I was studying people in their natural setting and was concerned with their cultural beliefs, norms and practices; auto-ethnography in that my online learning as a student/researcher was the focus; and virtual in that the research was conducted online). Hammersley (1992: 43-44) points out that ethnography is commonly justified in that, by entering into close and relatively prolonged interaction with people in their ordinary lives, we can understand their behaviours more accurately than by other approaches.

Virtual auto-ethnography enables the researcher to gain a reflexive understanding of what it is like to be part of the internet and to learn through the same medium as informants (Hine 2000: 10). Instead of being a detached and invisible analyst, it is possible to be active and visible within the field setting (ibid: 23).

My fieldwork involved spending 9 months as an online student; learning, and experiencing life first hand, with a cohort of e-learners. The researched programme was conducted entirely online and did not involve face-to-face meetings or seminars. A key part of the programme was the online discussion, moderated by a tutor but led by each of the students in turn. I participated fully in this programme, including taking the assessment along with my fellow students. This was not therefore "participant observation" as such but a very much more active approach for which I used the expression "participant participation".

The data consisted of my field notes and research diary as well as the transcripts of the seven online conferences which had taken place, including one particular exchange from the social area. In total this amounted to 191 individual postings by the conference participants. There were also transcripts of 14 interviews conducted with students and tutors. The interviews were semi-structured and were designed to be conversations rather than question and answer sessions to mirror as far as possible the tenor of the online discussions which the interviewees were familiar with.

Content analysis (Henri 1992) and metaphor analysis (Cameron 2003) were used to consider the significance of what learners did and did not say. The content and frequency of postings and the length of silences in between was readily established using these methods but content analysis alone revealed little about learning in the silence. The use of critical event recall techniques in the interviews (Tuckwell 1980; Kagan 1984; Kagan and Kagan 1991; Lally 2002; Steeples 2004; Carr *et al.* 2006) proved more successful in exploring the silence of lurkers. Critical event recall is a method of stimulating recall of an occurrence based on the premise that humans store up large amounts of information about events which they have participated in, much of the detail of which may be soon forgotten, but can be remembered with appropriate stimulus. In the case of a group of learners, it may enable previously unexpressed aspects of the learning experience to be recalled and verbalised; for example, when an interviewee is shown the transcripts of conferences they are able to reflect upon and analyse them, and, in so doing, verbalise what was not directly observable to the researcher from them (De Laat and Lally 2003). The rationale for using this technique, apart from its inherent value, was to

triangulate other forms of analysis (Lally 2002). This is due to the complexity of the learning processes involved in networked collaborative learning and the desire to gain a fuller understanding of these than might be possible by using content analysis alone, including the need to probe the "thinking behind the text" (ibid.).

A preliminary analysis of the content of conference transcripts was undertaken using categories emerging from the messages themselves, without detailed reference to the literature, drawing upon grounded theory (Glaser and Strauss 1967; Strauss and Corbin 1998). Further data analysis was carried out in the light of the literature review. The core principle of grounded theory is that theories are generated from an analysis of phenomena and are based on data gathered, interpreted and presented. This approach to research sits at the other end of the spectrum to approaches that seek to validate a given theory. A key advantage was that this approach allowed for correction of errors by refining data collection and was flexible enough to allow me to redirect the analysis as new issues emerged (Charmaz 2000: 522-3). It is therefore particularly suited to research in new or under-researched fields, such as those in which there are significant gaps in theory as is the case with networked collaborative learning. Moreover, the validity of this approach has been acknowledged by researchers in this field (McConnell 2000; Lally and De Laat 2002; De Laat and Lally 2003; Steeples 2004; McConnell 2005, 2006).

I read and re-read the transcripts of the online conferences and interviews to let themes emerge in a naturalistic way. I experimented with various grids or frameworks for analysis taking into account the work of Henri (1992) and Garrison and Anderson (2003). I designed and developed my own framework by listing my research questions, breaking them down into components and using these directly as the headings for analysis for both conference scripts and interviews. I freely acknowledge that attempting to analyse silence is challenging and that there may be no foolproof way of knowing everything that was going on in and outside of the conferences. However, I would contend that my approach has made some inroads into this difficult and complex area.

Ethical issues

A complex ethical issue was that of my position and identity as both researcher and participant in the programme. I was comfortable with the notion of wearing a number of hats during the programme and the research, and saw these as simply different aspects of myself. However, this may have been confusing for others. For example, I felt the need to

change my planned interview style from detached questioning (researcher) to discussion (student). As Hammersley and Atkinson (1995: 265) put it, even when the fact that the research is taking place is made explicit, it is not uncommon for participants to quickly forget this once they come to know the ethnographer as a person, and it would be disruptive for the researcher continually to issue the equivalent of a police caution. However, as Pole and Morrison (2003: 150) point out, research participants bring their own sets of understandings and meanings about the research as well as the role that ethnographers play. Part of the ethical complexity is recognising and interpreting the way that your identity as male or female, outsider or insider, youthful or mature, affects and is reflected in the collection and analysis of ethnographic data.

In order to conduct my research I obtained permission from the providing institution and undertook to abide by the conditions it imposed. My fellow students were aware that I was a researcher as well as student from the outset and consented. However, they (and I) could not have known at the time of consent exactly how I would interpret what was said and what happened or how I would write it up. In order to address these issues, I was keen to give participants a voice by showing them extracts from the conference transcripts to enable them to give their interpretation of them before I conducted the analysis.

In this chapter, in order to preserve anonymity of the participants other than myself, I have referred to my fellow students as Male or Female 1-3, the e-moderator as tutor and to myself as Sue.

Findings and discussion

Occurrence of silence

I defined online silence as a significant gap between postings and determined a "significant" gap as three days or more. I identified three categories of silence:

- Total silence: no-one in the group posting to a particular conference
- Individual silence: a particular individual not contributing to a conference
- Partial silence: only one or two students contributing to a particular conference and the others not participating.

The second and third categories are not mutually exclusive: when one or two people are contributing but other individuals in the group are not, there is both partial and individual silence.

During the 4-month conferencing period I identified 14 instances of total silence, ranging in duration from 3 days to 14 days, the average length being 5.8 days. Individual silence was clearly acceptable behaviour for some students, notably Male 2 who only contributed 4 postings in total and did not participate at all in 4 of the 7 conferences.

Partial silence was noticeable at the start of the first conference when the leader made five consecutive postings without any other student joining in and it took 20 days for all students to post a message. It was also particularly apparent in Conferences 4, 6 and 7, where the tutor was at times forced to "become a student" in order to sustain the discussions due to non-participation by a number of people, especially two of the male participants and, to a lesser extent, two of the females. In Conference 6 only two students in the cohort participated. The final conference was structured differently to the others, with three linked threads, but only three students participated.

Silence as a benefit to online learning

Interviewees found it difficult to say what learning had been going on in times of silence. Even when they were taken through the relevant conference scripts in interview and asked about these times, they could not remember whether or what they were learning at those specific moments. However, the conference transcripts revealed some relevant evidence; for example, there was clearly some email contact between participants outside of the conferences, in order to share and solve particular problems, especially over technical matters. Almost all learners said in interview that, outside of the conferences, they looked up resources posted by others:

> I did pursue about getting a copy of 'E-tivities' at one point... I looked at some of the stuff especially that Guardian article that [the tutor] mentioned. I read through that and I think I put some feedback on that one. Generally speaking if people put a link on I'd have a look.
> (Male 3, interview).

There was evidence that people discovered resources outside of the main conferencing area, reflected, then came back to the conferencing with new thoughts and ideas to share with others:

> Recommend reading... 'E-Learning the Second Wave' recently posted as attachment to message of same title in [the café].
> (Tutor, Conference 5).

> Wow ... - that Article really got me thinking. I wonder if my own experience of e-learning relates much at all to what the author was talking about! What wave am I in - probably fallen off my ancient surf board by now!
> (Sue, Conference 5).

I had been reading the book "E-tivities" (Salmon 2002) which suggested ways to respond to messages encouragingly, and gave the example of a reply which began with "Wow!" (Salmon 2002: 59). I therefore started my posting using the same word to be positive and enthusiastic, with view to encouraging further dialogue. What I had learned in the silence outside of the conferences directly affected my activity in that conference.

One of the benefits of computer conferencing identified in the literature is that it allows participants thinking time before posting (Buckner and Morss 1999; Light and Light 1999; Brookfield and Preskill 2005). This view was supported by the evidence from the researched programme:

> I wanted to contribute to and other things I felt well I couldn't. I read quite a lot what was going on but I didn't in all cases contribute to the message 'cos I didn't feel - possibly I needed time to think about what to say so possibly in some cases I didn't have that time to do it.
> (Male 1, interview).

Those who stated in interview that they needed time to think before posting were generally slow to post and the most silent online. This tends to accord with research showing that computer conferencing is good for quiet, reflective people (Light and Light 1999). These people clearly need silence as a space for their learning:

> Sue: Was there any specific reason why you didn't post something up if you actually logged on and read..?
> Female 2: Yes, yes because I am very, very, very methodical. I sit and think about things for hours. I mean I would wake up in the middle of the night and I would be thinking about it. But I think that's me.
> (Female 2, interview).

Silence as a barrier to online learning

Whilst, for some people, silence may have been an opportunity to think and prepare before posting, for others it was clearly a negative experience:

> I was a bit frustrated with people that they weren't doing what they should be doing...I wanted regular contributions to be made and they weren't being made...
> (Male 3, interview).

In cases where the voices of participants are unheard there may be a feeling that the cohort has been deprived of the potential richness of all the possible views and experience which could have provided fulfilling collaboration:

> I'm thinking about [Female 1] – who's another person a very, very experienced person she'd already been on umpteen online things and is involved you know designing courses for [name] and all this stuff and I would have loved to know...more of what she had to say.
> (Sue, when interviewing the Tutor).

Those who were contributing a lot felt that the non-participants were failing to take their turn and "saying too little" and that this was a problem for the learning of the cohort. This seems in line with Brookfield and Preskills' views (2005) that reflective silence may be valuable to individuals, especially to introverted or intimidated students but, by implication, too much silence can have a negative effect on learning. This is acknowledged by one of the low posters:

> Maybe I reflect a little too much and don't do enough...I think it probably didn't help because I was reflecting and not doing it, it really didn't help.
> (Female 2, interview).

Much is made of how power may be exercised, particularly between the sexes, by devices such as deliberate use of silence, interruption, setting the tone and showing expertise in ways that may be difficult to challenge (Dendrinos and Pedro 1997). Although it may not be technically possible to interrupt in asynchronous computer conferencing, it is possible to dominate by indirectly preventing others "speaking". In the researched programme, this was not always gender specific; an example is the start of Conference 3 led by Male 1:

> I think learner motivation is an important issue regarding online learning, so what do you all think?
> (Male 1, Conference 3).

> If we are looking at learner motivation we should consider... [gives long list of points]. This is not exhaustive but these are some points that quickly spring to mind. Others can add to this.
> (Male 3, Conference 3).

Here Male 3 almost swamped the leader's contribution by imposing his own content and method of dealing with the subject (listing). Arguably this is the equivalent of interruption online as well as an exertion of power.

If remaining silent amounts to ignoring the poster's wish for a reply, online silence may be the equivalent of face-to-face interruption, in that it amounts to exerting power. For example, I asked a series of questions at the end of Conference 4. These never received a reply from any of the other students and the conference ended in mid air leaving me with a feeling of being stranded with my questions left unanswered.

Conclusions

Having silent time in which to reflect may benefit some online learners. However, since it is impossible to collaborate on your own, on programmes for which collaboration is required, online silence by individuals is antisocial if it deprives other people of group collaboration. This accords with Brookfield and Preskills' view (2005) that reflective silence may be valuable to individuals but too much silence can have a negative effect on learning. My research findings go further and suggest that individuals are saying too little when it becomes a problem for the group's learning.

A pedagogy of online silence therefore needs the tutor to assess and balance the needs of individuals with that of the group so as to maximise opportunities for learning for all. The tutor should allow sufficient silence for people to reflect and learn whilst also encouraging optimum participation so that the group can benefit from the views and experience of others. Whether or not individuals contribute to the conferencing is important and tutors should actively encouraging participation. Institutions need to have a clear policy on how much contribution is required by individuals and learners should provide evidence of collaboration as part of their assessment. It should not be possible to pass the assessment without making a minimum contribution towards collaboration and assessment strategies should positively recognise and reward contributions towards collaboration.

Researching online lurking is challenging. Using content analysis alone is inadequate in analysing periods when no content is produced and it is necessary to devise ways of facilitating learners to recall what learning occurred during online silence. Researchers need to behave ethically and imaginatively in collecting and analysing data in this field.

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